

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 16-09-1985		2. REPORT TYPE final		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE MILITARY STANDARD (MIL-STD-667B) Sanitary Standards for Shell Egg Plants				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Office of the Surgeon General. HQDA (DASG-VCP) Washington, DC 20310				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT This standard establishes the general sanitary requirements for shell egg plants. This standard is applicable to all types of plants supplying shell eggs destined for Armed Forces procurement. This standard is intended to insure clean, wholesome food products that are free from chemical, microbiological, and physical contaminants and to prevent the transmission of foodborne disease to members of the Armed Forces.					
15. SUBJECT TERMS eggs, shells, sanitation, foodborne disease					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. TELEPHONE NUMBER (Include area code)
UU	UU				

VET SCI. DIV
LIBRARY
ROOM 250
Please sign out
if removed

MIL-STD-667C

16 September 1985

SUPERSEDING

MIL-STD-667B

8 August 1979

MILITARY STANDARD

SANITARY STANDARDS FOR SHELL EGG PLANTS



20071005330

FSC 8910

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

MIL-STD-667C

16 September 1985

DEPARTMENT OF DEFENSE
Washington, D.C. 20310

Sanitary Standards for Shell Egg Plants

MIL-STD-667C

1. This Military Standard is approved for use by all Departments and Agencies of the Department of Defense.
 2. The proponent agency of this regulation is the Office of the Surgeon General. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to HQDA (DASG-VCP) WASH, DC 20310 or use DD Form 1426 (Standardization Document Improvement Proposal) which is self-addressed appearing at the end of this document.
-

CONTENTS

		PAGE
Paragraph 1.	SCOPE-----	1
1.1	Purpose-----	1
1.2	Application-----	1
1.3	Objectives-----	1
1.4	Limitations-----	1
2.	REFERENCED DOCUMENTS-----	1
2.1	Issues of documents-----	1
2.2	Other publications-----	2
3.	DEFINITIONS-----	2
3.1	General-----	2
3.1.1	Adequate-----	2
3.1.2	Adulterated-----	2
3.1.3	Contamination-----	2
3.1.4	Food-----	3
3.1.5	Plant-----	3
3.1.6	Processing-----	3
3.1.7	Production area-----	3
3.1.8	Product area-----	3
3.1.9	Product zone (food contact surface)-----	3
3.1.10	Sanitize-----	3
3.1.11	Shell Eggs-----	3
3.1.12	Wholesome-----	3
4.	GENERAL REQUIREMENTS-----	3
4.1	Sanitary compliance rating (SCR)-----	3
4.2	Plant sanitary compliance checklist-----	3
4.2.1	Recording of defects-----	3
4.2.2	Computation of the sanitary compliance rating-----	4
4.2.3	Checklist reproduction-----	4
5.	DETAILED REQUIREMENTS-----	4
5.1	Premises-----	4
5.2	Raw materials-----	4
5.2.1	Shell eggs-----	4
5.2.2	Processing oil-----	4
5.2.3	Single-service articles and packaging materials-----	5
5.3	Construction of building-----	5
5.4	Lighting-----	5
5.5	Ventilation and humidity-----	5
5.6	Water supply-----	5
5.7	Ice (if used)-----	6
5.8	Disposal of wastes-----	6
5.9	Toilet, dressing room and handwashing facilities-----	6
5.10	Construction and repair of equipment and utensils-----	7
5.10.1	Equipment and utensils-----	7
5.10.2	Oil reclamation equipment-----	7
5.11	Cleaning and sanitizing treatment-----	7

CONTENTS (CONT)

	PAGE
Paragraph 5.11.1	Shell egg processing equipment----- 8
5.11.2	Shell egg cleaning equipment----- 8
5.12	Methods----- 8
5.12.1	Shell egg protecting operations----- 8
5.12.2	Shell egg cleaning operations----- 8
5.13	Public health controls----- 8
5.14	Cooling and refrigeration----- 9
5.15	Storing and storage facilities----- 9
5.16	Control of insects, birds, and animals----- 9
5.17	Vehicles and transportation facilities----- 9
5.18	Cleanliness and health of personnel----- 9
5.18.1	Cleanliness----- 9
5.18.2	Health----- 10
Appendix	Shell Egg Plant Sanitary Compliance Checklist DD Form 2363

1. SCOPE

1.1 Purpose. This standard establishes the general sanitary requirements for shell egg plants.

1.2 Application. This standard is applicable to all types of plants supplying shell eggs destined for Armed Forces procurement. Compliance with this standard is mandatory for the listing of plants in the Directory of Sanitarily Approved Establishments for Armed Forces Procurement as provided in AR 40-657/NAVSUPINST 4355.4 /AFR 161-32/MCOP 10110.31 .

1.3 Objectives. This standard is intended to insure clean, wholesome food products that are free from chemical, microbiological, and physical contaminants and to prevent the transmission of foodborne disease to members of the Armed Forces.

1.4 Limitations. This standard will not be used to determine the capability of an establishment to produce or furnish products or services which are in compliance with specifications or other purchase descriptions.

2. REFERENCED DOCUMENTS

2.1 Issues of documents. The following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this standard to the extent specified herein.

LAWS AND REGULATIONS

Environmental Protection Agency (EPA)

Code of Federal Regulations (CFR) Title 40, Protection of the Environment

(Application for copies should be addressed to Superintendent of Public Documents, US Government Printing Office, Washington, DC 20402.)

US Department of Agriculture (USDA)

Code of Federal Regulations (CFR), Title 7, Agriculture, and Regulations Promulgated Thereunder

List of Proprietary Substances and Nonfood Compounds Authorized for Use under USDA Inspection and Grading Programs

(Application for copies should be addressed to Superintendent of Public Documents, US Government Printing Office, Washington, DC 20402.)

US Department of Health and Human Services (HHS)

Code of Federal Regulations (CFR), Title 21, Food and Drug, and Regulations Promulgated Thereunder

(Application for copies should be addressed to Superintendent of Public

Documents, US Government Printing Office, Washington, DC 20402.)

2.2 Other publications. The following documents form a part of this standard to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply:

Illuminating Engineering Society (IES)

IES Lighting Handbook

(Application for copies should be addressed to Illuminating Engineering Society, 40 United Engineering Center, 345 East 47th Street, New York, NY 10017.)

National Sanitation Foundation (NSF)

NSF Standard 37 for Air Curtains for Entranceways in Food Establishments

NSF Standard C-6 for Continuous Cloth Towel Dispensers

(Application for copies should be addressed to the National Sanitation Foundation, PO Box 1468, Ann Arbor, MI 48106.)

(Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

3. DEFINITIONS

3.1 General.

3.1.1 Adequate. Methods which are needed to accomplish the intended purpose in keeping with accepted public health practices.

3.1.2 Adulterated. Adulterated shall mean the condition of a food (a) if it bears or contains any poisonous or deleterious substance in a quantity which may render it injurious to health; (b) if it bears or contains added poisonous or deleterious substance for which no safe tolerance has been officially established, or in excess of such tolerance if one has been established; (c) if it consists in whole or part of any filthy, putrid, or decomposed substance, or if it is otherwise unfit for human consumption; (d) if it has been processed, prepared, packed, or held under insanitary conditions, whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health; (e) if it is in whole or in part the product of a diseased animal, or an animal which had died otherwise than by slaughter; or (f) if its container is composed in whole, or in part, of any poisonous or deleterious substance which may render the contents injurious to health.

3.1.3 Contamination. Contamination shall be the act or process of exposing the product to an adulterant or unwholesome material.

3.1.4 Food. Any raw, cooked, or processed edible substance, ice, beverage, or ingredient used or intended for use or sale in whole or in part for human consumption.

3.1.5 Plant. The building or buildings or parts thereof, used for or in connection with the manufacturing, processing, packaging, labeling, or holding of human food.

3.1.6 Processing. Processing is all steps in the manufacture, preparation, and packaging of a food product into its final form.

3.1.7 Production area. The room or area in which processing occurs.

3.1.8 Product area. The production area and all other areas where the product, ingredients, and packaging materials are handled or stored.

3.1.9 Product zone (food contact surface). The surface of any equipment, utensils, or other material that contacts the unpackaged product or ingredients during processing.

3.1.10 Sanitize. An adequate treatment of clean product zones by a process that is effective in destroying vegetative cells of pathogenic bacteria and in substantially reducing numbers of other microorganisms. Such treatment shall not adversely affect the product and shall be safe for the consumer.

3.1.11 Shell egg. A shell egg is the egg of a domesticated chicken.

3.1.12 Wholesome. That characteristic possessed by a food that is conducive to good health and well being in the consumer.

4. GENERAL REQUIREMENTS

4.1 Sanitary compliance rating (SCR). Establishments that attain an SCR of 90 or more shall be recommended for listing in the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement, provided no critical defects, determined in accordance with 4.2.1, are recorded. When a critical defect is recorded, an SCR shall not be computed and the plant shall not be recommended for listing or retention in the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement. Even though a critical defect is noted, the inspection of the plant will be completed noting all deficiencies.

4.2 Plant sanitary compliance checklist. The sanitary requirements are set forth in this military standard and itemized as sanitation defects in column 1 of the checklist (see Appendix). The individual defects are given assigned points in column 2 of the checklist, with some being designated as critical.

4.2.1 Recording of defects. The inspector designates as critical or numerically rates the observed sanitation defects. The numerical rating shall be within the numerical range of the assigned defect points in column 2 and recorded in column 3. Any defect entry and related defect points that are not applicable to the plant shall be deleted by lining out the nonapplicable defect and assigned defect points. Nonapplicable defect points shall not be included when totaling

column 2. In instances where the inspector considers a defect to be of such magnitude as to constitute a serious health hazard, the numerical rating shall be deleted in column 2 and the word "critical" shall be recorded in columns 2 and 3. Defects which are designated as critical in the checklist may not be downgraded or assigned defect points. Numerical and critical defects shall be explained in the remarks section in sufficient detail so as to clearly describe the condition which resulted in the disrating. Deficiencies not listed in the checklist that are observed and considered by the inspector to be of sufficient importance to affect the SCR will likewise be explained in this section.

4.2.2 Computation of the sanitary compliance rating. If a critical defect is recorded, an SCR shall not be computed. If no critical defects are found, columns 2 and 3 are totaled and the SCR shall be computed using the following formula:

$$\frac{\text{Net total of column 2} - \text{Net total of column 3}}{\text{Net total of column 2}} \times 100 = \text{SCR}$$

The SCR assigned will be rounded to the nearest whole percent.

4.2.3 Checklist reproduction. DD Form 2363 (Shell Egg Plant Sanitary Compliance Checklist) will be locally reproduced on 8 1/2" x 11" paper. A copy for local reproduction purposes is located at the back of this MIL STD.

5. DETAILED REQUIREMENTS

5.1 Premises. The premises shall present a clean and orderly appearance. They shall be well drained, free of environmental conditions and/or materials that are a nuisance or a hazard to sanitation. The area shall be free of weeds, debris, and unused equipment and materials. The area shall be free of waste materials that are stored or handled in such a manner as to be a potential health hazard. The presence of any harborage, attractant, and/or breeding area for insects, rodents, or birds shall not be permitted. If the plant grounds are bordered by grounds not under the plant operator's control, care must be exercised in the plant by inspection, extermination, or other means to effect exclusion of pests, dirt, and other filth that may be a source of food contamination. The approaches to receiving and shipping docks shall be kept clean and maintained to minimize dust.

5.2 Raw materials. All raw materials must be obtained from approved sources as required by AR 40-657/NAVSUPINST 4355.4 /AFR 161-32/MCOP 10110.31. Food which shows evidence of adulteration, contamination, active insect infestation or any condition that from a public health or aesthetic standpoint renders the product unfit for human consumption, shall not be accepted by the plant.

5.2.1 Shell eggs. The shell eggs, when received, shall show no visible evidence of insanitary conditions, contamination, or mishandling which, from a sanitary standpoint, would make the eggs unfit for consumption. Those stained and dirty conditions of the shell normally seen in current farm-receipt eggs shall not preclude the acceptance of such product for further processing.

5.2.2 Processing oil. The processing oil, when used, shall be clean and free from foreign materials. Oil having any off odor, or that is obviously contaminated, shall not be used in shell egg protection.

5.2.3 Single-service articles and packaging materials. Single-service articles and packaging materials shall be free of contamination and maintained in sanitary boxes, cartons, tubes, or otherwise protected and handled in a sanitary manner.

5.3 Construction of building. The building shall be large enough to accommodate the operation without hampering sanitary practices. Floors, walls, and ceilings shall be constructed of materials that can readily be kept clean, sanitary, and in good repair. An unnecessary clutter of wiring, pipes, hangers, ducts, etc., shall be avoided. Pipe openings, vents, etc., through walls shall be sealed or otherwise protected to prohibit entrance of vermin. Ceilings shall be free of peeling paint (painted ceilings shall be avoided) and condensates. The exterior openings, including doors, windows, conveyor openings, pipe openings, and vents, shall be clean and in good repair. Where practicable, exterior openings shall be equipped with screens or other effective means (for example, air curtains, overlapping plastic strips) to prevent the entrance of insects, birds, and/or other animals. When the screening of openings is impracticable, such as in receiving areas, flying insect entry may be controlled by properly positioned air curtains or overlapping plastic strips large enough to cover the total door opening. Air curtains shall comply with the NSF Standard No. 37 for Air Curtains for Entranceways in Food Establishments. Screen doors shall open outward and be self-closing. Rooms in the processing areas shall not open directly into barns, stables, living quarters, toilets, garages, or maintenance shops.

5.4. Lighting. Each room shall have sufficient natural or artificial lighting for the purpose for which it is to be used. Lighting intensities shall conform to the intensities established in the latest edition of the IES Lighting Handbook. Lights in the processing areas shall be equipped with protective shields or shall be of such construction that they will not shatter if broken.

5.5 Ventilation and humidity. Humidity shall be regulated in conjunction with ventilation or air movement to control condensation, objectionable odors, and mold growth on ceilings and walls in all areas. Air for ventilation shall be adequately filtered as appropriate to prevent contamination. Ventilation systems shall be kept clean and maintained in good repair.

5.6 Water supply. The water supply shall be readily accessible, of a sufficient quantity, and have an acceptable sanitary quality, as established in the National Interim Primary Drinking Water Regulations or individual military service regulations. The water heater shall be of such capacity so as to be able to furnish an undiminished supply of hot water for a complete food plant cleaning procedure at all times throughout a working day. There shall be mixing valves at all scullery sinks and hose connections. There shall be no cross-connection between potable and nonpotable lines. There shall be protection against possible back-siphonage. There shall be effective protection of wells from contamination by surface drainage or floods. Bacteriological examination and water test results shall be maintained at the plant to show that the water supply has been approved by Federal, state, or local health authorities within the past six months.* Within CONUS, Hawaii, and Alaska, a water supply approved by a Federal, state, or local health authority will be considered potable, and certification of potability will normally not be required. Nonpotable water outlets, if present, shall be located and identified by color code and labeled nonpotable so as to preclude the use of nonpotable water for other than the purposes designated.

The color code used shall be readily identifiable, prominently displayed, and clearly understood by plant personnel.**

*If Federal, state, or local health authorities do not have such evidence of water potability, applicable military regulations governing potable water supplies will be followed to approve the water supply(ies).

**The use of nonpotable water is permitted for the flushing of urinals and commodes, for boilers, and for such other similar uses provided it does not directly, nor indirectly, contact the ingredients, product, packaging materials, general product area, or personnel handling the product.

5.7 Ice (if used). Ice shall be made from a supply of potable water which meets the requirements of 5.6. It shall be manufactured, handled, stored, and used in a sanitary manner.

5.8 Disposal of wastes. Liquid wastes shall be conveyed to a public sewer through inclosed piping or shall be disposed of in another sanitary sewage system approved by local/state health authorities. Floor drains shall be functional and properly trapped. Dry and product waste shall be placed in suitable covered receptacles conveniently located throughout the plant and premises. All waste shall be collected and disposed of at frequent intervals in a sanitary manner to prevent insect and rodent attraction and development of objectionable odors.

5.9 Toilet, dressing room, and handwashing facilities. A sufficient number of sanitary toilets or privies shall be provided. Employee toilet facilities required:

<u>Persons of same sex</u>	<u>Toilet bowls required</u>
1-15 inclusive	1
16-35 inclusive	2
36-55 inclusive	*3
56-80 inclusive	*4
For each additional 30 persons in excess of 80	*1

*Urinals may be substituted for toilet bowls but only to the extent of one-third of the total number of bowls stated.

Toilet rooms shall be conveniently located, constructed of materials which can be easily and satisfactorily cleaned, adequately lighted, and separately vented to the outside. They shall be constructed so that they do not open directly into rooms or areas where components or products are processed or stored. The doors shall be tight-fitting and self-closing. A sign directing employees to wash their hands before returning to work shall be conspicuously posted in all toilet rooms. Handwashing signs shall be multilingual, as appropriate. Handwashing facilities, with running water at a suitable temperature for handwashing, soap (liquid or powder), soap dispenser, and sanitary single-service towel, or clean individual sections of continuous cloth toweling, or hot air blower-type hand dryers will be conveniently located in the toilet

rooms and throughout the processing areas. Continuous cloth towel dispensers shall comply with the National Sanitation Standard No. C-6 for Continuous Cloth Towel Dispensers. Toilets, dressing rooms, and handwashing facilities will be maintained in a clean, orderly manner. There shall be a sanitary waste receptacle in each toilet room. Toilets/dressing rooms shall not be used for storage of cleaning equipment. Privies shall be separate from the processing building, and of a sanitary type, location, and construction. Each employee shall be furnished a locker or other suitable facility, and lockers and dressing rooms shall be kept clean and orderly.

5.10 Construction and repair of equipment and utensils. Equipment and utensils shall be designed, constructed, and used so as to preclude the adulteration of food with toxic lubricants, fuel, metal fragments, contaminated water, and any other contaminants. Lubricants used on contact surfaces of moving parts to pumps, product handling and processing equipment shall be edible and nontoxic and shall be used sparingly. The only lubricants authorized for use are those listed in the USDA publication, "List of Proprietary Substances and Nonfood Compounds Authorized for Use Under USDA Inspection and Grading Programs."

5.10.1 Equipment and utensils. All equipment and utensils shall be designed and be of such material and workmanship so as to be smooth, easily cleanable, and durable. The food contact surfaces of such equipment and utensils shall, in addition, be easily accessible for cleaning, nontoxic, corrosion-resistant, and consist of nonabsorbent material. Food contact surfaces and solder shall be corrosive-resistant and shall not contain antimony, bismuth, cadmium, lead, zinc, and/or other toxic materials. Solder on the food contact surface shall be hard solder of such formulation so as to be nontoxic under use conditions. Equipment shall be so located as to provide adequate space for cleaning, maintenance, and inspection.

5.10.2 Oil reclamation equipment. If oil reclamation equipment is used, it must be provided with filtering devices and heating equipment.

5.11 Cleaning and sanitizing treatment. The methods used for cleaning and sanitizing shall be such that the product shall not be contaminated or adulterated. All products shall be moved sufficiently far away or otherwise protected prior to the start of cleaning to avoid contamination or adulteration by splashing. All multiple-service containers, equipment, and utensils used in handling, processing, storing or transporting of exposed product shall be disassembled, as applicable, cleaned thoroughly, and sanitized after use. Chemicals used in cleaning and sanitizing treatments shall be properly labeled and stored. Cleaning and sanitizing chemicals shall be used IAW the manufacturer's recommendation. The only chemical compounds authorized for use are those listed in the USDA publication, "List of Proprietary Substances and Nonfood Compounds Authorized for Use Under USDA Inspection, and Grading Programs." When chemical sanitizers are used, a test kit or other device that accurately measures the correct concentration of the solution shall be provided and used. If water is to be used as the sanitizer, it must be not less than 170°F (77°C). All rooms and areas used to receive, process, or store components or the finished product shall be maintained in a clean, sanitary manner so as to preclude the possibility of microbiological, chemical, or physical contamination.

5.11.1 Shell egg processing equipment. Shell egg processing equipment shall be washed, rinsed, and sanitized each time the oil is removed.

5.11.2 Shell egg cleaning equipment. Shell egg cleaning equipment shall be cleaned after each day's use or more frequently, if necessary.

5.12 Methods. Methods used in the processing, handling, and storage shall be conducted in a sanitary manner so as to prevent contamination or adulteration, and not contribute to deterioration of the product from a public health standpoint.

5.12.1 Shell egg protecting operations. Shell egg protecting (oil processing) operations shall be conducted in a manner to avoid contamination of the product and maximize conservation of its quality. Eggs with excess moisture on the shell shall not be shell protected. The processing oil shall be filtered and heat treated daily. Processing oil that has been previously used and which has become contaminated shall be filtered and heat treated at 180°F (82°C) for 3 minutes prior to use. The processing equipment shall be cleaned daily when in use. Adequate coverage and protection against dust and dirt shall be provided when the equipment is not in use.

5.12.2 Shell egg cleaning operations. Only potable water may be used to wash eggs. The temperature of the wash water shall be maintained at 90°F (32°C) or higher and shall be at least 20°F (6.7°C) warmer than the temperature of the eggs to be washed. These temperatures shall be maintained throughout the cleaning cycle. Only approved cleaning and sanitizing compounds (see the USDA publication "List of Proprietary Substances and Nonfood Compounds Authorized for Use Under USDA Inspection and Grading Programs") shall be used in the wash and rinse water. Wash water shall be changed approximately every 4 hours or more often if needed to maintain sanitary conditions and at the end of each shift. Replacement water shall be added continuously to the wash water of washers to maintain a continuous overflow. Rinse water, chlorine, or quarternary sanitizing rinse may be used as part of the replacement water, provided they are compatible with the washing compound. Iodine sanitizing rinse shall not be used as part of the replacement water. Waste water from the egg washing operation shall be piped directly to drains. The washing and drying operation shall be continuous and completed as rapidly as possible. Eggs shall not be allowed to stand or soak in water. Immersion-type washers shall not be used. Prewetting shell eggs prior to washing may be accomplished by spraying a continuous flow of water over the eggs in a manner which permits the water to drain away. The temperature of the water shall be the same as prescribed in this paragraph. Washed eggs shall be spray-rinsed with warm water containing an approved sanitizer of not less than 50 ppm nor more than 200 ppm of available chlorine or its equivalent. Test kits will be provided and used to determine the strength of the sanitizing solution. During any rest period, eggs shall be removed from the washing and rinsing area of the egg washer and from the scanning area whenever there is a buildup of heat. Washed eggs shall be reasonably dry before cartoning or casing.

5.13 Public health controls. When applicable, means shall be provided to assure adequate public health control of the raw materials and finished product. The means shall include physical, chemical, and microbiological examinations and/or tests necessary to establish that product has not been adulterated or

contaminated. Evidence that all necessary examinations and/or tests have been performed and records of such examinations and/or tests shall be on file and made available to the military inspector.

5.14 Cooling and refrigeration. Cooler rooms shall be free from objectionable odors and from mold. They also shall be maintained in a sanitary condition. Cooler rooms shall have refrigeration facilities capable of reducing within 24 hours and holding the maximum volume of eggs handled to 60°F (15°C) or below. Accurate thermometers shall be provided so as to indicate representative air temperatures. All shell egg coolers shall be equipped with a hygrometer or portable equipment, such as a psychrometer, to determine the relative humidity. Humidifying equipment capable of maintaining a relative humidity which will minimize shrinkage shall be provided.

5.15 Storing and storage facilities. Storage facilities shall be provided for storing raw materials, packing and packaging materials, and finished products. They shall be clean, sanitary, and in good repair. Storing methods which minimize deterioration and prevent contamination shall be used. Shelves, cabinets, and dunnage or pallets shall be used where necessary to protect materials from contamination.

5.16 Control of insects, birds, and animals. Insects, birds, and/or other animals shall be excluded from the plant. Effective measures for the control of insects, birds, and/or other animals shall be maintained at all times. Operations or procedures which produce rodent harborages or insect breeding areas are prohibited. Insecticides and rodenticides, if used, shall be only those which appear in the USDA publication, "List of Proprietary Substances and Nonfood Compounds Authorized for Use Under USDA Inspection and Grading Programs." These products shall be used in accordance with labeled directions and shall be handled and stored in a safe manner.

5.17 Vehicles and transportation facilities. Vehicles and transportation facilities shall be constructed and operated to protect contents from contamination and deterioration. They shall be kept clean and in good repair.

5.18 Cleanliness and health of personnel.

5.18.1 Cleanliness. All employees shall wash their hands before beginning work and upon returning to work after using toilet facilities, eating, smoking, and otherwise soiling their hands. They shall keep their hands clean and follow acceptable hygienic practices while on duty. Eating, expectorating, or use of tobacco in any form shall be prohibited in each room and compartment where any food products or supplies are prepared, stored, or otherwise handled. With the exception of plain wedding bands or emergency medical bracelets, employees shall not wear any jewelry or fingernail polish while working in the plant. All persons engaged in receiving, testing, processing, manufacturing, packaging, or handling food products shall wear clean, white, or light-colored washable or disposable outer garments that are suitable for the work being performed. Hair nets, caps, beard nets, or other effective hair restraints to effectively cover hair shall be worn so as to prevent contamination of food and food contact surfaces. Employee's personal effects shall not be stored in production areas.

5.18.2 Health. No person afflicted with, or a carrier of, a communicable disease shall be permitted in any room or compartment where products are prepared, manufactured, or otherwise handled. No person who has a discharging or infected wound, sore, or lesion on hands, arms, or other exposed portion of the body shall work in any processing room or in any capacity resulting in contact with the processing or handling of products, containers, or equipment. Where health authorities require health certificates, they shall be kept on file at the plant office. Plant personnel shall receive appropriate training in proper food handling techniques, disease control, and food protection principles and will be cognizant of the danger of poor personal hygiene and insanitary practices.

MIL-STD-667C
16 September 1985

Custodians:

Army - GL

Navy - SA

Air Force - 50

Review activities:

Army - MD

Navy - MS, SA

Air Force - 50

Preparing Activity:

Army - GL

Project No. 8910-0435

Copies of this standard for military use may be requisitioned on DD Form 1425 (Specification and Standard Requisition) and submitted to Commanding Officer Naval Publications and Form Center, 5801 Tabor Avenue, Philadelphia, PA 19120. The title and identifying symbol should be stipulated when requesting copies of military standard.

SHELL EGG PLANT SANITARY COMPLIANCE CHECKLIST

(This appendix is an integral part of MIL-STD 667C and its application is mandatory.)

1. DATE OF INSPECTION
(YYMMDD)

2. PLANT INSPECTED

a NAME

b ADDRESS

3. PLANT OWNER

a NAME OF COMPANY OR INDIVIDUAL

b TELEPHONE NUMBER

4. ACCOMPANYING INDIVIDUAL

a NAME

b TITLE

SANITATION DEFECTS (1)	ASSIGNED DEFECT POINTS (2)	INSPECTOR'S DEFECT POINTS (3)
5. PREMISES		
a Not cleaned or well organized	3	
b Not well drained	3	
c Surroundings not free from nuisances or sources of contamination	5	
d Approaches to shipping docks not clean and maintained to minimize dust	5	
6. RAW MATERIALS	Critical	
a Not from approved source	5	
b Show evidence of unsanitary conditions or contamination	5	
c Not processed, stored, or delivered under sanitary conditions	5	
d Processing oil not clean or free of foreign materials or of odors	4	
e Single-service articles and packaging materials not protected by sanitary boxes, cartons, or other means		
7. CONSTRUCTION OF BUILDING	4	
a Not large enough to accommodate the operation without hampering sanitary practices	4	
b Walls, floors, ceilings not in good repair or not constructed of materials that can easily be kept clean and sanitary	4	
c Unnecessary clutter of wiring, pipes, hangers, ducts	4	
d Insect and rodent proofing, where practicable, not present or functional	3	
e Air curtains, if used, not in compliance	3	
f Screen doors not outward opening and not self-closing	4	
g Processing area opens directly into living quarters, garages, or heavy maintenance shops		
8. LIGHTING	4	
a Insufficient lighting	5	
b Lights in processing area not equipped with shields when required		
9. VENTILATION AND HUMIDITY	5	
a Insufficient control of moisture and air movement	5	
b Presence of mold on walls or ceilings in processing or storage area	5	
c Accumulation of condensates in processing or storage areas	5	
d Air not filtered to prevent contamination as appropriate	3	
e Ventilation systems not clean or in good repair		
10. WATER SUPPLY	4	
a Not readily accessible	5	
b Inadequate in quantity	5	
c Undiminished supply of hot water not available	Critical	
d Cross-connection exists between potable and nonpotable water supply or sewage	5	
e Potability certificate not current or available	Critical	
f Potable water supply found to be nonpotable	5	
g Nonpotable water outlets not identified by prominently displayed color code	4	
h Mixing valves not available at all scullery sinks and hose connections	5	
i Not adequate protection against possible back-siphonage	Critical	
j Wells not effectively protected from contamination by surface drainage or floods		
11. ICE (if used)	Critical	
a Not made from potable water which meets requirements	5	
b Not manufactured, handled, stored, or used in a sanitary manner		

SHELL EGG PLANT SANITARY COMPLIANCE CHECKLIST

SANITATION DEFECTS (1)	ASSIGNED DEFECT POINTS (2)	INSPECTOR'S DEFECT POINTS (3)
12. DISPOSAL OF WASTES		
a. Liquid wastes not disposed in a sanitary manner	5	
b. Floor drains not functional or improperly trapped	3	
c. Waste not collected in suitable properly covered containers and disposed of at frequent intervals and/or in a sanitary manner	4	
13. TOILET, DRESSING ROOM, AND HANDWASHING FACILITIES		
a. Sufficient number of toilets or privies not provided	5	
b. Toilet rooms not conveniently located	4	
c. Toilet rooms constructed of materials that are not easily cleaned	4	
d. Toilet rooms not adequately lighted	2	
e. Toilet rooms not adequately vented to the outside	5	
f. Toilet rooms open directly into processing area	5	
g. Doors not self-closing and tight-fitting	3	
h. Absence of handwashing sign	3	
i. Absence of hot and cold water, soap dispenser, or appropriate hand-drying facilities	5	
j. Handwashing facilities not conveniently located	5	
k. Toilets, dressing rooms, and handwashing facilities not maintained in a clean, orderly manner	4	
l. Restrooms used for storage of cleaning equipment	3	
m. Privies not separate from the processing building	Critical	
n. Privies not of sanitary type, location, and construction	5	
o. Each employee not furnished a locker or other suitable facility	5	
14. CONSTRUCTION AND REPAIR OF EQUIPMENT AND UTENSILS		
a. Design, construction, and use of such equipment and utensils does not preclude adulteration of food	Critical	
b. All equipment and utensils not easily cleanable and durable	5	
c. Food contact surfaces not easily accessible for cleaning	5	
d. Food contact surfaces not nontoxic	Critical	
e. Food contact surface not corrosion resistant or not consisting of nonabsorbent material	5	
f. Equipment space is not adequate for proper cleaning, maintenance, and inspection	3	
g. Oil reclamation equipment not provided with filtering and heating equipment	5	
h. Prohibited lubricants used on food contact surfaces	Critical	
15. CLEANING AND SANITIZING TREATMENT		
a. Cleaning or sanitization methods do not prevent product contamination or adulteration	Critical	
b. All products not moved away or protected prior to equipment or area cleaning to avoid contamination or adulteration	Critical	
c. All multiservice containers, equipment, and utensils not cleaned and sanitized after use	5	
d. Cleaning and sanitizing chemicals not properly labeled or stored	5	
e. Unauthorized chemical compounds used for cleaning and sanitization	Critical	
f. Hot water used as a sanitizer less than 170°F (77°C)	5	
g. Rooms and areas not maintained in clean, sanitary manner	5	
h. Processing equipment not washed, rinsed, and sanitized each time oil is removed	5	
i. Shell egg cleaning equipment not cleaned daily or more frequently if necessary	5	
j. Cleaning and sanitizing chemicals not used in accordance with manufacturer's recommendation	Critical	
k. Test kits or other devices not used when chemical sanitizers are utilized	5	
16. METHODS		
a. Methods permit contamination of product	Critical	
b. Methods permit deterioration of product	5	
c. Processing oil not filtered or heated daily	5	
d. Processing oil, if contaminated, not filtered and heat treated at 180°F (82°C) for 3 minutes	5	
e. Processing equipment not cleaned daily	5	
f. Nonpotable water introduced into shell egg cleaning operation	Critical	
g. Cleaning water not maintained at proper temperature	5	
h. Unauthorized chemical compounds used for cleaning and sanitization	Critical	
i. Wash water not changed when required	5	
j. Replacement water not added continuously to wash water	4	
k. Iodine used as part of replacement water	5	

SHELL EGG PLANT SANITARY COMPLIANCE CHECKLIST		
SANITATION DEFECTS (1)	ASSIGNED DEFECT POINTS (2)	INSPECTOR'S DEFECT POINTS (3)
16. METHODS (Continued)		
l. Waste water not piped directly to drains	4	
m. Washing and drying operation not continuous	5	
n. Eggs allowed to stand or soak in water	5	
o. Immersion-type washers used	5	
p. Rinse water contains less than 50 ppm or more than 200 ppm of available chlorine or its equivalent	5	
q. Test kits or other devices not used to determine strength of shell egg sanitizing solution	5	
r. Eggs not removed from egg washer or scanning area during rest periods	5	
s. Washed eggs not reasonably dry before cartoning or casing	5	
17. PUBLIC HEALTH CONTROLS		
a. When applicable, examinations not performed to assure adequate public health control of the raw material and finished products	5	
b. Records of examination and tests of raw materials and finished products not available	5	
18. COOLING AND REFRIGERATION		
a. Facilities do not maintain product in a refrigerated state as required	5	
b. Design of equipment permits contamination or adulteration of product	Critical	
c. Accurate thermometer not indicating a representative air temperature	3	
d. Equipment not available to determine relative humidity	3	
e. Humidifying equipment not maintaining recommended relative humidity	5	
19. STORING AND STORAGE FACILITIES		
a. Storage facilities not clean, sanitary, or in good repair	3	
b. Storing methods do not minimize deterioration or contamination	5	
c. Shelves, cabinets, or dunnage not used where necessary to prevent contamination or deterioration	5	
20. CONTROL OF INSECTS, BIRDS, AND ANIMALS		
a. Presence of insects, birds, or animals in processing area	Critical	
b. Presence of insects, birds, or animals in nonprocessing area	Critical	
c. Effective measure for the control of insects, birds, and rodents not maintained at all times	3	
d. Rodent harborages or insect breeding places present	4	
e. Insecticides or rodenticides used not approved by USDA	Critical	
f. Insecticides or rodenticides not used by approved methods	3	
g. Insecticides or rodenticides are handled or stored in an unsafe manner	5	
21. VEHICLE AND TRANSPORTATION FACILITIES		
a. Not constructed or operated to protect contents from contamination or deterioration	Critical	
b. Not properly maintained or not clean	3	
22. CLEANLINESS AND HEALTH OF PERSONNEL		
a. Employees not washing hands after contamination	Critical	
b. Failure of employees to be hygienically clean	4	
c. Personnel not prohibited from eating, smoking, chewing tobacco, or expectorating in product handling areas	3	
d. Unauthorized jewelry or fingernail polish worn by plant employees	3	
e. Employees not wearing garments/hair restraints suitable for work being performed	5	
f. Storage of employees' personal effects in processing rooms	3	
g. Employees affected with or a carrier of a communicable or infectious disease not excluded from product areas	Critical	
h. Plant employees having an infectious wound, sore, or lesion on hands, arms, or other exposed parts of the body not excluded from contacting ingredients, product, or product zone	Critical	
i. Prescribed medical examinations of personnel not being made and/or records of such not available when required	4	
j. Plant personnel not instructed in acceptable hygienic practices and proper sanitary rules of food handling	Critical	
23. TOTALS		
24a. SANITARY COMPLIANCE RATING COMPUTATIONS	b. SANITARY COMPLIANCE RATING ASSIGNED	c. NUMBER OF CRITICAL DEFECTS

MIL-STD-667C
16 September 1985

SHELL EGG PLANT SANITARY COMPLIANCE CHECKLIST

25. OTHER REGULATORY AGENCIES CONCERNED WITH SANITATION OF THIS ESTABLISHMENT *(Record the agency, date and results of last inspection)*

26. METHODOLOGY SECTION *(Record narrative information describing the plant, premises, equipment and procedures)*

MIL-STD-667C

16 September 1985

SHELL EGG PLANT SANITARY COMPLIANCE CHECKLIST

27. REMARKS/RECOMMENDATIONS

28. INSPECTOR

a TYPED NAME

b TITLE

c SIGNATURE

d GRADE

e DATE SIGNED (YYMMDD)

MIL-STD-667C

6 September 1985

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1. DOCUMENT NUMBER

2. DOCUMENT TITLE

MIL-STD-667C-Sanitary Standards for Shell Egg Plants

3a. NAME OF SUBMITTING ORGANIZATION

4. TYPE OF ORGANIZATION (Mark one)

☐

VENDOR

☐

USER

☐

MANUFACTURER

☐

OTHER (Specify): _____

b. ADDRESS (Street, City, State, ZIP Code)

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER (Last, First, MI) - Optional

b. WORK TELEPHONE NUMBER (Include Area Code) - Optional

c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional

8. DATE OF SUBMISSION (YYMMDD)

INSTRUCTIONS: In a continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (*DO NOT STAPLE*), and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

NOTE: This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

(Fold along this line)

(Fold along this line)

Commandant
Academy of Health Sciences, US Army
ATTN: HSHA-IVS
Fort Sam Houston, TX 78234

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 12062 WASHINGTON, D.C.

POSTAGE WILL BE PAID BY DEPARTMENT OF THE ARMY

Commandant
Academy of Health Sciences, US Army
ATTN: HSHA-IVS
Fort Sam Houston, TX 78234

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES